Owners Manual
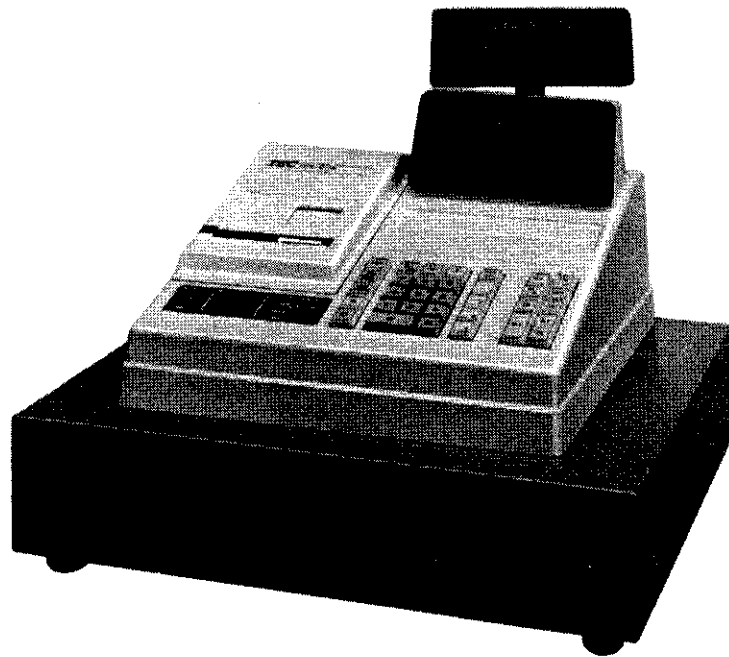
TEC ELECTRONIC CASH REGISTER

MA-205-10 SERIES

TEC **TOKYO ELECTRIC CO., LTD.**

TABLE OF CONTENTS

TO OUR CUSTOMERS

Thank you for choosing a TEC electronic cash register MA-205 series. This instruction manual provides a description of the functions and handling of this register and should be read carefully to obtain maximum performance. Since every consideration has been given to safety, there is no danger of damaging the machine by incorrect operation.

Please refer to this manual whenever you have any doubts concerning the machine. This machine has been manufactured under strict quality control and should give you full satisfaction. However, if the machine is damaged during transit, or there are any unclear points in this manual, please contact your local TEC representative.

[] The specifications described in this manual may be modified by TEC, if necessary.
[] Be sure to keep this manual for future reference.

PRECAUTIONS

1. The keys on the keyboard work with a light touch. Avoid pressing the keys too hard.
2. Avoid handling the machine with wet hands.
3. Do not apply thinner or other volatile oils to the cabinet or other plastic parts. If dirty, wipe off with a piece of cloth soaked in neutral detergent and squeezed tightly.

APPEARANCE AND NOMENCLATURE

Paper Cover
Journal Window
Receipt Outlet
Mode Lock
Cash Drawer

Rear/Remote Display
Front Display
Keyboard
Drawer Release Lock
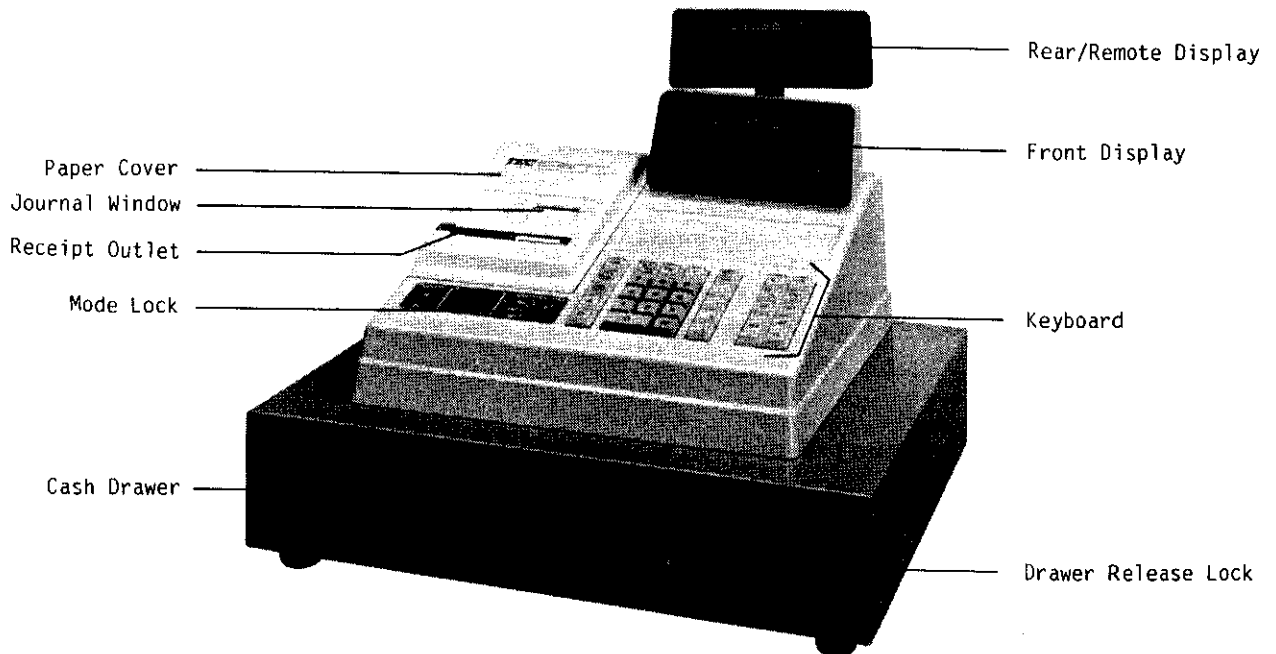
MODE LOCK AND MODE SELECTOR KEYS

MODE LOCK   (POSITION)   (FUNCTION)

SET ..... In this position, the register will allow programming operations.

OFF ..... No keys on the keyboard are accepted. Nothing is indicated in the display.

REG ..... Normal cash register operations are carried out in this mode. When the Mode Lock is changed from another position to this position, the current time is autoamtically displayed. The time display disappears on operating any key on the keyboard, power from OFF to ON, or Mode Lock position changes.

X .... The sale totals can be read and the programmed data can be verified in this position.

Z .... All the resettable totals and their counters will be read and reset in this position.

MODE SELECTOR KEYS

REG Key: The REG Key is used by the cashier who operates the register. This key can access the positions of OFF and REG.
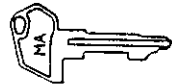
MA Key: The MA Key is used by the store manager who will daily supervise the collection of money and printout of transactions recorded by the register. This key can access the positions of OFF, REG, X, and Z.
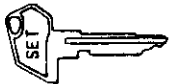
SET Key: The SET Key is used by the programmer. This key can access the positions of OFF and SET.

The keys may be inserted or pulled out at the "OFF" or "REG" position.

DISPLAY

The Operator's Display (front display) is located at the top of the register just above the keyboard. The Customer's Display may be used as Rear Display if it is kept in the receptacle or used as Remote Display if it is stretched up and turned to the required direction. The display has two types of indications -- numeric display and message descriptors.

The angle of the Operator's Display in the up-and-down direction is adjustable.
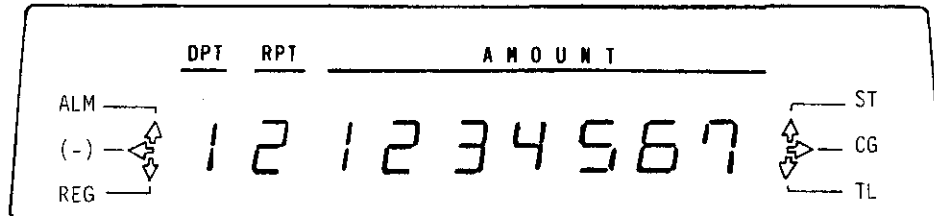
NUMERIC DISPLAY

AMOUNT (7 digits): Displays the numeric data, such as amount, quantity, time, etc.

RPT (1 digit): Displays the repeat count of the same item. The count is indicated from the second entry on, and only the first digit will be displayed even if the count exceeds nine.

DPT (1 digit): Displays the code which represents each Department Key. It stays lit when repeating the same department entry.

MESSAGE DESCRIPTORS (Arrow Marks)

ALM: Lights up to indicate that the last operation or numeric entry has resulted in an error. To clear the error condition, depress the [C] key.

(-): Lights up when the [RTN MDSE], [ITEM CORR], or [%-] key has been operated. It also light up when the [ST], [TXBL TL] or one of the media total keys has been depressed and the displayed amount is negative.

REG: Lights up when a sale item has been entered.

ST: Lights up when the subtotal amount is displayed after the [ST] key has been depressed. And it also lights up when the [TXBL TL] key has been operated.

CG: When an amount tendering operation has been performed, this lamp lights up with the change due displayed.

TL: Lights up on a finalizing operation with the total amount displayed when finalized without any amount tendered.

TIME DISPLAY

When the Mode Lock is turned to the "REG" position from any other position, the current time is automatically displayed in the AMOUNT portion. The displayed time will disappear on changing the mode to another, turning the power from OFF to ON, or starting any key-in operations on the keyboard.

TIME DISPLAY FORMAT

ex.) 8:05 a.m. $8-05$

1:24 p.m. (13:24) $13-24$

KEYBOARD LAYOUT

The following is the keyboard layout for the MA-205 series:

NS		
TX/M		
RTN MDSE		
X		
ITEM CORR		

C	RF	JF
7	8	9
4	5	6
1	2	3
0		00

RCPT ISSUE	
	1
	2
	3
	4

%-	#
R/A	PO
ST	Chg
TXBL TL	AT/TL

4 departments

2 departments

RCPT ISSUE
TXBL
1
NON TXBL
2
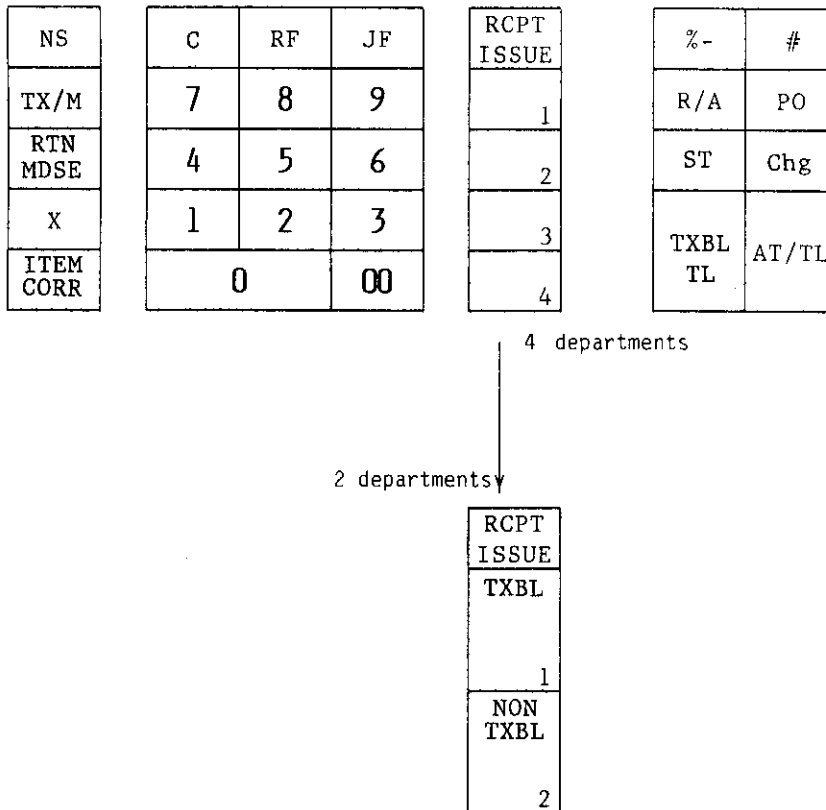
FUNCTION OF EACH KEY

ON

OFF

RECEIPT ON/OFF SWITCH ([RECEIPT ON/OFF])

This switch has two positions available: 'OFF' and 'ON' positions. When in the 'OFF', no receipt is issued from the register and sales are printed on the journal only. When the switch is set to the 'ON' position, sales are printed on both receipt roll and journal roll, then a receipt is issued which is handed to the customer.

Alternating the switch position during a registration will not result an error. In this case, the position at the time of the registration starting will rule whether a receipt is issued or not. When a reset (Z) report is taken, however, the data <u>will</u> be pirnted also on the receipt roll regardless of the switch position.

RF

RECEIPT FFED KEY ([RF])

This key is used to feed the receipt paper. As long as this key is depressed, the receipt paper keeps on feeding. Receipt feeding is possible even during a sale as standard feature. This key functions at any Mode Lock position except "OFF".

JF

JOURNAL FEED KEY ([JF])

This key is used to feed the journal paper. As long as this key is depressed, the journal paper keeps on feeding. Journal feeding is possible even during a sale. This key will function at any position of the Mode Lock except "OFF".

RCPT ISSUE

RECEIPT POST-ISSUE KEY ([RCPT ISSUE])

This key is used to issue the receipt of a sale when the sale has already been finalized with the [RECEIPT ON/OFF] switch positioned to OFF.

To operate, depress the [RCPT ISSUE] key without a numeric entry and with the [RECEPT ON/OFF] switch held to the OFF position. The receipt for the last sale is then issued, with only the sale total (but not the sale items) printed. This key will not function if another sale has already been under way.

NS

NO-SALE KEY ([NS])

This key is used to open the cash drawer for no-sale registrations, such as giving change, testing the register receipt print condition, etc.

To operate, simply depress this key with the Mode Lock positioned at "REG". A no-sale receipt is issued and the drawer is opened.

| # |

NON-ADD NUMBER PRINT KEY ([#])

> When the Mode Lock is in the "REG" position, this key is used to print a non-add number such as Code No., Account No., etc. on the receipt and journal for future reference. A maximum of 7-digit non-add number can be printed.

> To operate, enter the required number and depress the [#] key. It may be operated as the first line of the sale, between two line items, or after the subtotal amount if before finalizing the sale.

| RTN MDSE |

RETURNED MERCHANDISE KEY ([RTN MDSE])

> This key is used to make a subtracting entry for a returned item. This key is also used to invalidate an item entered before the last entry within a transaction, in which case the [ITEM CORR] key cannot invalidate the designated item.

> To operate, depress the [RTN MDSE] before or after the amount entry, and then depress the department key from which the amount should be subtracted.

| ITEM CORR |

ITEM CORRECT KEY ([ITEM CORR])

> This key is used to delete the last item within a transaction. Depressing this key once will remove the last item from the bill, printing a line through that item on the receipt and journal.

> The item-correct funtion is effective even when a numeric entry and a [C] key depression are already performed between the item-to-be-corrected and the [ITEM CORR] key depression. However, if any other key-in operation including an error comes inbetween, the item-correct will not function for the last item any longer.

> The [ITEM CORR] key may function to correct any last item entered through a department, [%-]key. But a department item entered with the [RTN MDSE] key cannot be item-corrected.

| %- |

PERCENT DISCOUNT KEY ([%-])

> This key is used to enter a discount calculated on a percentage rate. When this key is depressed after a department item, the discount amount is calculated on the preset or manual-entry rate and subtracted from the department item amount. This key can also be operated in the same way after pressing the [ST] key if the percent discounting is performed for the sale total.

> A percent rate can be preset on this key; however, if another rate is entered through the numeric keyboard prior to the depression of the [%-] key, the entered rate prevails. The preset rate will be active by a simple depression of the [%-] key.

> The percent discounting is effective only once for each department item and subtotal amount.

The [%-] entry may be item-corrected (by [ITEM CORR]), but it will not be processed to the ITEM CORRECT total memory.

A percent discounting is allowed even on a returned merchandise item entry.

| TX/M |

TAX MODIFIER KEY ([TX/M])

This key is used to reverse the tax status of departments and the [%-] key. When this key is depressed prior to depressing a Department Key or the [%-] key, a taxable department is reversed to non-taxable, while a non-taxable deapartment or the [%-] key (fixed as a non-taxable key) is reversed to taxable.
This key can be depressed before or after the amount entry, but must be depressed before the department or the [%-] key.

| X |

QUANTITY EXTENSION (MULTIPLICATION) KEY ([X])

This key is used to multiply a department entry by a quantity.

The multiplication order is as follows:

|QUANTITY| → [X] → |UNIT PRICE| → [DEPARTMENT KEY]
max. 3 digits   max. 6 digits   The product must not
                                    exceed 7 digits

| C |

CLEAR KEY ([C])

This key is used to correct a numeric entry error if prior to depressing any other function key, or to correct any error condition and cancel the alarm buzzer.

If this key is depressed before depressing the Department Key in a quantity extension sequence, all of the quantity entry, the [X] key entry, and the unit price entry are cleared at a time.

If the [C] key is depressed after a subtotal is obtained, the subtotal is then displayed.

The [C] key may be operated regardless of any position of the Mode Lock except "OFF".

7	8	9
4	5	6
1	2	3
0	00

NUMREIC KEYS (|___|)

These are used to enter numeric values such as amount, quantity, and non-add number.

Depressing the [00] key once is the same as depressing the [0] key twice consecutively.

The maximum listing capacity for numeric entry is 8 digits.

DEPARTMENT KEYS ([DEPT])   2-dept. model   4-dept. model

```
┌──────────┐      ┌──────────┐
│  TXBL    │      │        1 │
│          │      ├──────────┤
│        1 │      │        2 │
├──────────┤      ├──────────┤
│  NON     │      │        3 │
│  TXBL    │      ├──────────┤
│        2 │      │        4 │
└──────────┘      └──────────┘
```

These are department keys through which sales items are registered.

Usually, Department 1 Key is programmed to be used to enter taxable items, and Department 2 Key is programmed to enter non-taxable items. However, each department key can be programmed to enter either taxable or non-taxable items.

To operate, enter the amount of the item and depress the appropriate department key. A consecutive depression of the same department key will repeat the same amount entry, which can be repeated as many times as required. However, the amount of "0" cannot be entered through any of the department keys.

The maximum digits for a department entry is limited by the programmed listing capacity. If no specific listing capacity is programmed, a maximum of 7-digit amount can be entered.

Refer to the [X] key description on page 7 as to QUANTITY EXTENSION using department keys.

```
┌──────────┐
│   R/A    │
└──────────┘
```

RECEIVED ON ACCOUNT KEY ([R/A])

A received-on-account transaction is used to identify money which is in the drawer but not business. The amount entered is thus included in the "Cash-in-drawer" total but not in the sales totals.

To operate, enter an amount of payment and then depress the [R/A] key whilst the register is in an out-of-sale condition. A receipt is issued, and the drawer opens. No entry with a "0" amount is allowed through the [R/A] key.

```
┌──────────┐
│   PO     │
└──────────┘
```

PAID OUT KEY ([PO])

A paid-out transaction is used when an amount of money is removed from the cash drawer without relating to a sale (reverse to R/A). When the [PO] key is used, the amount entered is subtracted from the "Cash-in-drawer" total but does not affect the sales totals.

To operate, enter a cash amount to be taken from the drawer and depress the [PO] key whilst the register is in an out-of-sale condition. A receipt is issued, and the drawer opens to enable cash payout. No entry with a "0" amount is allowed through the [PO] key.

```
┌─────────┐
│         │
│   ST    │
│         │
└─────────┘
```

SUBTOTAL KEY ([ST])

This key is used to obtain the subtotal amount during a sale. When this key is depressed after all the items have been rung up, the subtotal of the sale is printed and displayed.

If the [ST] key is depressed more than once consecutively, the first depression only will print <u>and</u> display the subtotal; further depressions will only display but <u>not</u> print the subtotal amount.

```
┌─────────┐
│         │
│  AT/TL  │
│         │
└─────────┘
```

CASH AMOUNT TENDER / TOTAL KEY ([AT/TL])

This key is used to finalize a cash sale.

This key can be programmed to be used as one of the following three types of keys:

1. AMOUNT TENDER KEY

   If so programmed, this key requires a tendered amount entry prior to depressing the key. The tax on the sale is calculated and printed (if any) with the "TX" symbol, the sale total including the tax is printed with the "TL" symbol, the cash tendered amount is printed with the "AT" symbol, and the change due with the "CG" symbol (if any) on separate lines.

   When the tendered amount is less than the sale total, all the printing sequence above will be the same except that the balance due is displayed (not printed) instead of the change due. In this case, the sale is not yet finalized; and another cash tendering must be done, or the [Chg] key may be depressed if the balance due is processed as an alternative method of payment.

   When the sale total is negative, as in some cases with returned merchandise entries, the [AT/TL] key must be depressed without a prior amount entry, as described in "2. TOTAL KEY" below.

2. TOTAL KEY

   If so programmed, this key is depressed without a prior amount entry for sale finalization. The tax on the sale is calculated and printed, and the sale total including the tax is printed with the "CA" symbol.

   When the sale total is negative, the sale total including the tax is printed with the "−" as well as the "CA" symbol. In this case, the operator must refund the amount in cash to the customer.

3. AMOUNT TENDER / TOTAL KEY

   If so programmed, this key will function as TENDER KEY (as described in 1 above) when any prior amount is entered, and will function as TOTAL KEY (as described in 2 above) when depressed without an amount entry.

CHARGE TOTAL KEY ([Chg])

Chg

This key is usually used as "Charge Total" key. However, it may be used for other media such as payments in check or credit card. Thus this key is used as an alternative method of payment for media other than cash. To operate, depress the [Chg] key for sale finalization instead of [AT/TL]. This key operates the same as the [AT/TL] key when it is programmed as "2. TOTAL KEY".

This key can be combined with the [AT/TL] key if a payment for the sale is split by cash and charge. In such cases, the [Chg] key must be depressed as the last key to finalize the sale. (If the [AT/TL] key is programmed as Type 2. TOTAL KEY, this split-tendering operation will not be allowed.)

The [Chg] key can even finalize a negative sale total.

TAXABLE TOTAL KEY ([TXBL TL])

TXBL
TL

This key is used to obtain the contents of the main itemizer plus tax due. The amount will only display but not print.

In order to allow add-on operations to follow the use of this key, the taxes are not added into any totals until actual finalization is initiated.

REGISTERING PROCEDURE FOR SALES

The following are patterns for actual registering operations. In the following examples, "|___|" indicates an input thorugh the numeric keys, "[ ]" indicates a depression of the transaction key, and "---" indicates other registering and/or finalizing operations.

NO-SALE (Mode Lock: REG, must operate outside a sale)

    [NS]

DEPARTMENT ENTRY (Mode Lock: REG)

    |AMOUNT| [DEPARTMENT Key] → ---

    <u>TAX MODIFICATION</u>:

        [TX/M] |AMOUNT| [non-taxable DEPT] → --- ⎤

        or   to reverse a non-taxable

        |AMOUNT| [TX/M] [non-taxable DEPT] → --- ⎦ Department into taxable

        [TX/M] |AMOUNT| [taxable DEPT] → --- ⎤

        or   to reverse a taxable Depart-

        |AMOUNT| [TX/M] [taxable DEPT] → --- ⎦ ment to non-taxable

REPEAT ENTRY (Mode Lock: REG)

    |AMOUNT| [DEPT] → [Same DEPT] → [Same DEPT] → ---

                   Repeat depressing the same Department Key as many times as
                   the desired count.

QUANTITY EXTENSION (MULTIPLICATION) (Mode Lock: REG)

    |QUANTITY| [X] |UNIT PRICE| [DEPT] → ---   (The product must not
    max. 3 dig.   max. 6 dig.   exceed 7 digits.)

ITEM CORRECT (Mode Lock: REG)

    |AMOUNT| [DEPT] [ITEM CORR] → ---   (The item marked with "*" is
                *   invalidated from the sale.)

    |AMOUNT| [DEPT] [Same DEPT] [Same DEPT] [ITEM CORR] → ---
                                      *   (An item-correct after repeat
                                            entries will invalidate only the
                                            last one item of the repeated.)

|QUANTITY| [X] |UNIT PRICE| [DEPT] [ITEM CORR] → ---
_____
             *   (An item-correct after a quantity
                                          extension will invalidate the
                                          product that is resulted from the
                                          multiplication.)

--- (|MANUAL RATE|) [%-] [ITEM CORR] → ---
_____
             *

RETURNED MERCHANDISE or DESIGNATED LINE VOID (Mode Lock: REG)

[RTN MDSE] |AMOUNT TO BE RETURNED or VOIDED| [DEPT] → ---

or

|AMOUNT TO BE RETURNED or VOIDED| [RTN MDSE] [DEPT] → ---

Return or Void With Quantity Extension:

Depress [RTN MDSE] at any one of the positions marked with "*" below:

|QUANTITY| [X] |UNIT PRICE| [DEPT] → ---
  *   * *   *

PERCENT DISCOUNT (Mode Lock: REG)

|AMOUNT| [DEPT] ⌐→ [%-] → ---   ⌉ Discounting from
             │ (discount with the preset rate) │ a Department item
             └→ |RATE| [%-] → ---   ⌟
                  (discount with a manual rate; enter in 1 or 2 digits,
                  1 to 99%)

--- → [ST] ⌐→ [%-] → ---   ⌉ Discounting from the
          │ (discount with the preset rate) │ entire sale total
          └→ |RATE| [%-] → ---   ⌟
              (discount with a manual rate; enter in 1 or 2 digits;
              1 to 99%)

    NOTE: The [TX/M] key may be operated to reverse the [%-] key
            status from non-taxable to taxable. The [ITEM CORR] key is
            also operative to invalidate the last [%-] key entry.

NON-ADD NUMBER PRINT (Mode Lock: REG)

(--- →) |NUMBER| [#] → ---
        max. 7 digits

RECEIVED ON ACCOUNT (Mode Lock: REG, must operate outside a sale)

|PAYMENT AMOUNT RECEIVED| [R/A]

PAID OUT (Mode Lock: REG, must operate outside a sale)

|AMOUNT TO BE PAID OUT FROM THE CASH DRAWER| [PO]

SUBTOTAL READ (Mode Lock: REG)

    --- → [ST] → --- ... The sale total so far is displayed and printed, but the sale is not finalized.

TAXABLE TOTAL READ (Mode Lock: REG)

    --- → [TXBL TL] → --- ... The amount of sale total including the tax due so far is displayed (not printed).

CASH TOTAL (Mode Lock: REG)

    --- → ([ST]) → ([TXBL TL]) → [AT/TL] ... The drawer opens, the sale total including tax is displayed and printed, and a receipt is issued.

CASH TENDERING (Mode Lock: REG)

    --- → ([ST]) → ([TXBL TL]) → |TENDERED CASH AMOUNT| [AT/TL]

                     ... The change due (if any) is displayed, the drawer opens, and a receipt is issued with the sale total, amount tendered, and change due printed.

CHARGE TOTAL (Mode Lock: REG)   ... The drawer opens, the sale total is desplayed and printed, and a

    ---→([ST]) → ([TXBL TL]) → [Chg]   receipt is issued.

MULTI-TENDERING (Mode Lock: REG)   ... Short tendering repeated multiple times by cash.

    --- → ([ST]) → ([TXBL TL]) ⌐

                   └→|AMOUNT TENDERED| [AT/TL] ⌐

                   └→|AMOUNT TENDERED| [AT/TL] ⌐

                   └→(|AMOUNT TENDERED|) [AT/TL]

SPLIT-TENDERING (Mode Lock: REG)   ... Short tendering repeated by different media keys

    --- → ([ST]) → ([TXBL TL]) → |CASH AMOUNT TENDERED| [AT/TL] ⌐

                   └→ [Chg]   ... Cash and Charge

    NOTES: 1. In both MULTI-TENDERING and SPLIT-TENDERING operations, the sale is finalized, a receipt is issued, and the drawer opens on reaching the sale total amount.

2. If [AT/TL] is programmed to allow total function only, split-tendering or multi-tendering cannot be operated. If [AT/TL] is programmed to allow tendering, the "|AMOUNT TENDERED|[AT/TL]" sequence must be operated first, and the [Chg] key depression must be the last in a split-tendering operation.

RECEIPT POST-ISSUE (Mode Lock: REG, [RECEIPT ON/OFF] Switch to OFF)

When a sale has just been finalized with the [RECEIPT ON/OFF] switch set to OFF but the customer then claims the receipt for the sale. In this case, simply depress the [RCPT ISSUE] key. A receipt with only the sale total amount of the last sale printed is issued.

The receipt post-issue operation is no more available when another sale is already been under way on the register.

REGISTERING RECEIPT SAMPLES

NO-SALE

Thank you
Call again

1 2 - 2 0 - 8 6   ← — Date

← — Store Name/Message Stamp is printed here.

★   NS   ← — No-sale Symbol

Receipt
Consecutive No. → 0 0 0 8 ⁰/₉

Current Time → 1 0 - 1 3

**DEPARTMENT ENTRY,
REPEAT ENTRY**

Thank you
Call again

1 2 - 2 0 - 8 6

— Taxable Symbol

1   ★ 1.2 3   TM — Dept.1 $1.23
2   ★ 4.5 6   — Dept.2 $4.56
2   ★ 4.5 6   ⎤ The above item is
2   ★ 4.5 6   ⎦ repeated two more times.
    ★ 1.4 9 1   ST — Sub-total
    ★ 0.0 5   TX — Tax due
    ★ 1.4 9 6   CA — Finalized as cash sale
0 0 1.5 ⁰/₉
1 0 - 2 1

**QUANTITY EXTENTION
(MULTIPLICATION)**

Thank you
Call again

1 2 - 2 0 - 8 6

        1 2   X   — Quantity 12
        5.0 0   @   — Unit Price $5.00
1   ★ 6 0.0 0   TM   — Product $60.00 into Dept.1
        4   X
        2.0 0   @
2   ★ 8.0 0
    ★ 6 8.0 0   ST
    ★ 2.4 0   TX
    ★ 7 0.4 0   CA
0 0 1.5 ⁰/₉
1 0 - 2 2

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ITEM CORRECT on DEPARTMENT ITEM

```
  Thank you
  Call again

  1 2 - 2 0 - 8 6


1     *1.00  ₣
2 ----*5.00-  ₅
2     *6.00
      *7.00   ᵗ
      *0.04  ₓ
      *7.04  ᵍᵗ
0 0 1.7 ⁿᵒ
1 0 - 2 4
```

— Dept.2 $5.00, but
   item-corrected

ITEM CORRECT on %- ENTRY

```
  Thank you
  Call again

  1 2 - 2 0 - 8 6


1     *1.23  ₣
      *1.23   ᵗ
      1 0.    % -
-----0.12-  ᵥᵈ
      *1.23  ᵗ
      *0.05  ₓ
      *1.28  ₛ
0 0 1.3 ⁿᵒ
1 0 - 2 6
```

} 10% of the above sub-total
  amount is calculated,
  but item-corrected.

CHARGE SALE, NON-ADD NUMBER PRINT

```
  Thank you
  Call again

  1 2 - 2 0 - 8 6


1     *1.23  ₣
2     *4.56
      *5.79   ᵗ
#  1 2 3 4 5 6
      *0.05  ₓ
      *5.84  ꜀ₕ
0 0 1.9 ⁿᵒ
1 0 - 3 5
```

— Customer No.
   (non-add No.)

— Finalized as charge

%- on Dept. and Sub-total

```
  Thank you
  Call again

  1 2 - 2 0 - 8 6


1     *1.00  ₣
      5.     % -
      -0.05
2     *2.00
      *2.95   ᵗ
      1 0.    % -
      -0.30
      *2.65   ᵗ
      *0.04  ₓ
      *2.69  ₛ
0 0 2.0 ⁿᵒ
1 0 - 3 7
```

} -5% from the above item
  (0.05 is calculated and
    subtracted.)

} -10% from the sub-total
  ($0.30 is calculated and
    subtracted.)

-16-

```
    Thank you
    Call again

    12-20-86


        *5.00  PO
    0021 ≌
    10-40
```

$5.00 is paid out.

```
    Thank you
    Call again

    12-20-86


        *10.00  RA
    0023 ≌
    10-41
```

$10.00 is received on account.

```
    Thank you
    Call again

    12-20-86

 1      *3.00  TM
        *0.12  TX
        *3.12  TL
        *0.30  AT AT
        *10.00 AT
        *7.18  CG
    0026 ≌
    10-44
```

Sale Total
$0.30 tendered, but short.
Another $10.00 tendered,
and Change $7.18 is
calculated, displayed and
printed.

```
    Thank you
    Call again

    12-20-86

 2      *5.00
 1      *3.00  TM
        *8.00  ST
        *0.12  TX
        *8.12  TL
        *5.00  AT
        *3.12  CH
    0027 ≌
    10-46
```

Sale Total
$5.00 Cash Tendered
The balance $3.12 is
finalized as Charge

RETURNED MERCHANDISE WITHIN A SALE

```
   Thank you
   Call again

   12-20-86


1    *1200  TM          Sale Item
2     *300              Sale Item
1    *1200  TM RT       Returned Item of Dept.1
1    *1000  TM          Sale Item
     *1300  ST
      *040  TX
     *1340  CA          The balance is paid
 0028 ≗                 in cash.
 10-48
```

RETURNED MERCHANDISE OUTSIDE A SALE

```
   Thank you
   Call again

   12-20-86


1     *500  TM RT       Returned Item of Dept.1
      -020  TX          Tax to be returned
      -520  CA          Total is negative,
 0029 ≗                 so it must be paid
 10-49                  to the customer in
                        cash.
```

NON-TAXABLE [%-] OPERATION

```
   Thank you
   Call again

   12-20-86


1     *456  TM
2     *256
      *712  ST
     10     %-          ⎤ 10 [%-] results:
     -071  TM           ⎦  non-taxable discount
      *016  TX          ← —— Compare the tax due.
      *657  CA
 0031 ≗
 10-52
```

TAXABLE [%-] OPERATION

```
   Thank you
   Call again

   12-20-86


1     *456  TM
2     *256
      *712  ST
     10     %-          ⎤ [TX/M] 10 [%-] results:
     -071                ⎦  taxable discount
      *018  TX    →
      *659  CA
 0030 ≗
 10-50
```

RECEIPT POST-ISSUE   When the register is operated with the [RECEIPT ON/OFF] switch positioned to "OFF", no receipt will be issued but the sales content is recorded on the journal roll only. If the customer claims the sale receipt in that case, depress the [RCPT ISSUE] key before going into another sale. The receipt with only the sale total printed will be issued, no matter in what media that sale was finalized.

Journal Print   Receipt Post-issued

```
 2      *5.00
 1      *3.00       TM
        *8.00       ST
        *0.12       TX
        *8.12       AT TL
        *5.00       
        *3.12       CH
00342
11-01
```

The receipt
prints only
the total
amount of
the sale,
whatever media
the sale was
paid in.

```
    Thank you
    Call again


    12-20-86



          *8.12    TL
00342
11-01
```
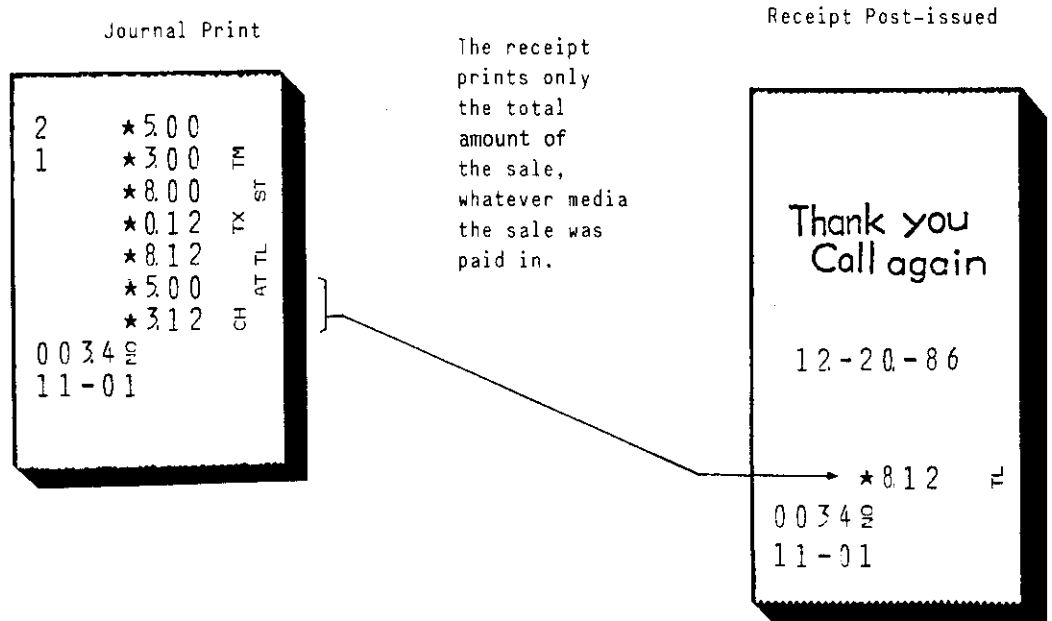
IF POWER FAILS DURING
PRINTING OF AN ITEM...

ex.)

```
    Thank you
    Call again


    12-20-86



 2      *2.00
 2      *2.00
 1      *3.00    TM
        *7.00    ST
        *0.12    TX
        *7.12    CA
00392
11-12
```

Power failure took place when this item was being printed. When the power regained, the same entire line item is printed again from the top (i.e. double-print). The register memory is protected by the back-up battery. So there is no problem in that case.
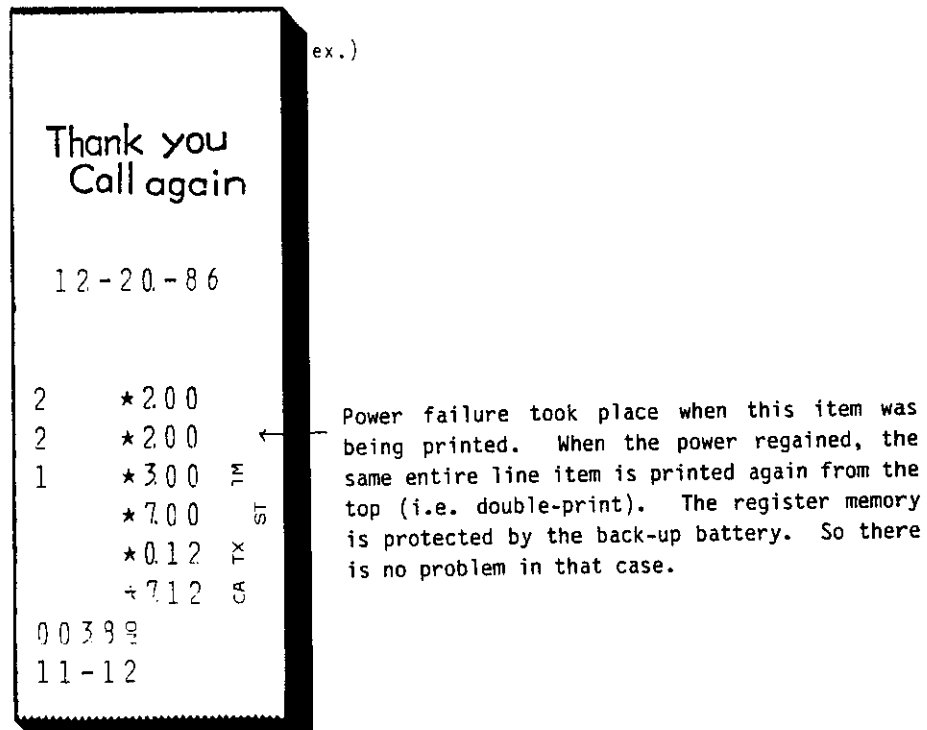
READ (X) AND RESET (Z) REPORTS

The following table shows the key operation to take each report. The "X" and "Z" reports have exactly the same print content, except that:

1. The "X" report allows to read the totals but not clear memories, while the "Z" report allow to read the totals and at the same time all the resettable memories will be cleared when the report has been taken.

2. The symbol "X" is printed as the header of a "X" report, while "Z" is printed on a "Z" report, to indicate the type of report.

3. A reset count is printed near the bottom of a "Z" report only.

TABLE OF OPERATIONS FOR X AND Z REPORTS

REMPORT NAME	KEY OPERATION	SAMPLE PAGE
AUTO READ AUTO RESET	Mode Lock: X Mode Lock: Z } [AT/TL]	21
GT READ GT RESET	Mode Lock: X Mode Lock: Z } 20 [AT/TL]	22

NOTES: AUTO READ/RESET reports are for the daily accumulated sales data.

GT READ/RESET reports are for the accumulated sales data in a week or a month (the reset period depends on each store).

VERIFYING THE PROGRAMMED DATA and TAX CALCULATION TEST, which are also available in the "X" mode.
As for these operations and print samples, refer to the page 31.

Auto Read Report	Description	Auto Reset Report
	Mode Lock : X Depress [AT/TL]	Mode Lock : Z Depress [AT/TL]
Thank you Call again		Thank you Call again
12-20-86	Date	12-20-86
X	Read Report Symbol ──── Reset Report Symbol	Z
★255.18 GT	Grande Total (non-resettable)	★255.18 GT
56. GS	Gross Sale Item Count	56. GS
★212.74 GS	Gross Sale Amount Total	★212.74 GS
1 29	Dept : 1 Sales Item Count	1 29.
★109.81	Sales Amount Total	★109.81
2 24.	Dept. 2	2 24.
★76.36		★76.36
3 0.	Dept. 3	3 0.
★0.00		★0.00
4 0.	Dept. 4	4 0.
★0.00		★0.00
★4.37 TX	Tax Total	★4.37 TX
21. CT	Total Customer Count	21. CT
★190.54 NS	Net Sale Amount Total	★190.54 NS
4. %-	Percent Discount Count	4. %-
★1.77 %-	Percent Discount Total	★1.77 %-
18. CA	Cash Sales Customer Count	18. CA
★176.69 CA TL	Cash Sales Amount Total	★176.69 CA TL
3. CH	Charge Customer Count	3. CH
★12.08 CH TL	Charge Sales Amount Total	★12.08 CH TL
1. RA	Received on Account Count	1. RA
★10.00 RA TL	Received on Account Total	★10.00 RA TL
2. PO	Paid Out Count	2. PO
★10.00 PO TL	Paid Out Total	★10.00 PO TL
★176.69 CA ID	Cash-in -Drawer Amount Total	★176.69 CA ID
1. VD	Item Correct Count	1. VD
★5.00 VD	Item Correct Total	★5.00 VD
2. RT	Returned Merchandise Item Count	2. RT
★17.20 RT	Returned Merchandise Total	★17.20 RT
0042 ②	Consecutive No.	Reset Count → 0003 Z
11-17	Current Time	0044 ②
	(Hourly Range Sales Customer Counts and Amount Totals, if Hourly Range Table has been programmed.)	11-18

The print items and their print order are the same as in AUTO READ/RESET reports, except that there is no Hourly Range Sales data memory is provided for GT READ/RESET reports.

```
     Thank you                    Thank you
     Call again                   Call again


     12-20-86                     12-20-86


          X 20                         Z 20
      *19438  ᴳᵀ                   *19438  ᴳᵀ
         49.  ᴳˢ                      49.  ᴳˢ
      *19438  ᴳˢ                   *19438  ᴳˢ
   1    27.                     1    27.
      *10217                       *10217
   2    19.                     2    19.
       *6592                        *6592
   3     0.                     3     0.
       *0.00                        *0.00
   4     0.                     4     0.
       *0.00                        *0.00
       *409  ᵀˣ                     *409  ᵀˣ
        16.  ᶜᵁ ᵀᴸ                   16.  ᶜᵁ ᵀᴸ
      *17218  ᴺˢ                   *17218  ᴺˢ
         1.   %-                      1.   %-
       *0.71  %-                    *0.71  %-
        13.  ᶜᵁ ᶜᴬ                   13.  ᶜᵁ ᶜᴬ
      *16267  ᶜᴬ ᵀᴸ               *16267  ᶜᴬ ᵀᴸ
         3.  ᶜᵁ ᶜᴴ                    3.  ᶜᵁ ᶜᴴ
       *8.80  ᶜᴴ ᵀᴸ                 *8.80  ᶜᴴ ᵀᴸ
         1.  ᴿᴬ                       1.  ᴿᴬ
      *10.00  ᴿᴬ ᵀᴸ               *10.00  ᴿᴬ ᵀᴸ
         1.  ᴾᴼ                       1.  ᴾᴼ
       *5.00  ᴾᴼ ᵀᴸ                 *5.00  ᴾᴼ ᵀᴸ
      *16767  ᶜᴬ ᴵᴰ               *16767  ᶜᴬ ᴵᴰ
         1.  ᴿᵀ ⱽᴰ                    1.  ⱽᴰ
       *5.00  ᴿᵀ ⱽᴰ                 *5.00  ⱽᴰ
         2.  ᴿᵀ                       2.
       *1720  ᴿᵀ                   *1720  ᴿᵀ
   00282                        0001Z
   11-11                        00292
                                11-12
```

GT Read Header ← → GT Reset Header

GT Reset Count → 0001Z

PROGRAMMING OF THE REGISTER

SETTING BASIC REGISTER REQUIREMENTS BY 6-DIGIT CODE ENTRY

This determines the GT print/non-print, CA Balance print/non-print, Consecutive No. print/non-print, [AT/TL] key function, Time display/non-display, Time print/non-print, Date print order, and %- rounding selection.

CONDITION: After a reset

OPERATION: Mode Lock: SET

Enter a 6-digit code, depress [ST].

ex.) 0 → 0 → 1 → 0 → 1 → 1 ——→ [ST]

GT(Grand Total) Print/ Non-Print
CA Balance Print/ Non-print
   0: Non-print (US)
   1: Print (US)
   2: Non-print (CA)
   3: Print (CA)

Consecutive No. Print/Non-print
on receipts:
   0: Non-print
   1: Print

[AT/TL] Key Function:
   0: Amount Tender and Cash Total
   1: Cash Total only
   2: Amount Tender only (NOTE 1 next page.)

Time Display/ Non-display
Time Print/Non-print on receipts:
   0: Time Non-display, Time Print
   1: Time Display, Time Print
   2: Time Non-display, Time Non-print
   3: Time Display, Time Non-print

Date Set and Print Order
   0: MONTH-DAY-YEAR
   1: DAY-MONTH-YEAR
   2: YEAR-MONTH-DAY

Fraction Rounding Selection for %- Calculation:
   0: Round Off
   1: Round Up
   2: Round Down

NOTES: 1. Even when the [AT/TL] key is set as "Amount Tender only" (Code 2), the key will function as Total Key without a tendered amount entry if the sale total is negative.

2. The preceding 0's may be omitted. As in this example, 1011 may be entered instead of 001011.

3. If a value other than the designated above is ever entered in the above operation, the maximum value of the designated will automatically be regarded as the set value.(e.g.: If "3" is entered for the %- rounding selection, it will result as the code "2" (Round Down) is selected.

SAMPLE OPERATION:

To set the following requirements:

GT Print/ Non-print-- Print: 1
Consecutive No. Print-- Print: 1
[AT/TL]-- Amount Tender and Cash Total: 0
Time Display/Non Display, Time Print/Non-print-- Display, Print: 1
Date Set and Print Order-- MONTH-DAY-YEAR: 0
%- Rounding Selection-- Round Off: 0

OPERATION: Turn the Mode Lock to SET.
Enter 001011 (or 1011),
depress [ST].

```
Thank you
  Call again


  12-20-86


# 001011
00452
11-23
```
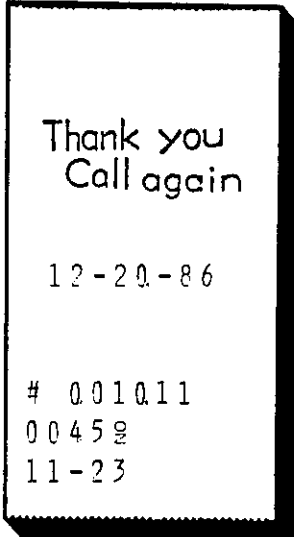
SETTING THE LISTING CAPACITY

The Listing Capacity (LC) is set in order to prevent an excessive amount entry mistake by the operator at the earliest stage. For example, if the LC is set to 5 digits and when the operator indexes 100000 ($1,000.00) for a $100.00-priced commodity by mistake, the register will go into an error. The LC to be set here will be effective in entering an amount through any of the department keys in the "REG" mode.

CONDITION: After a reset

OPERATION: Mode Lock: SET

Enter one-digit code (1 to 7) to designate the limit digits for a registration, and depress [#] .

NOTE: Code 0, 8, or 9 cannot be set. It will result in an error if ever attempted.

SAMPLE OPERATION:

To set "5 digits" for the Listing Capacity:

Mode Lock to SET.
Enter 5, depress [#] . ⟶

```
Thank you
  Call again


  12-20-86


#      005
00462
11-24
```
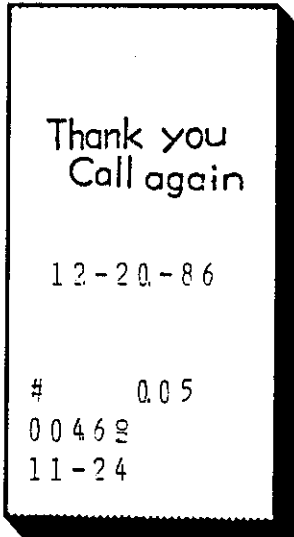
SETTING TAX TABLE

The MA-205 model can calculate tax using one of three methods of tax calculation, which can be programmed in the programmable memory. The three methods are:

1. FULL-BREAK METHOD (COMBINATION OF NON-CYCLIC BREAKS AND CYCLIC BREAKS)
   (Maximum 32 breaks programmable)
2. COMBINATION OF NON-CYCLIC BREAKS AND % RATE
   (Maximum 32 breaks programmable)
3. % RATE ONLY

CONDITION: After a reset

OPERATION: Mode Lock: SET

Select one of the following three methods to meet your tax status:

1. FULL BREAK METHOD

Non-cyclic Breaks

1) Enter the first break point of price that is non-taxable limit, and depress [TX/M].
2) Enter the next break point of price that is the limit to collect the tax amount 1¢, and depress [TX/M].
3) Repeat Step 2) above, with alternating each limit price for collecting tax amount of 2¢, 3¢, 4¢ ... until the non-cyclic breaks are all entered.
4) Depress [ST] to end the non-cyclic break entries.

Cyclic Breaks

1) Do the same operation as in Step 1) above, entering each limit price for each tax amount that increases by 1¢, followed by the [TX/M] key. Enter the last price so that the difference between the last non-cyclic break price already entered and the last cyclic one will be a multiple of one dollar ($9.00 maximum). Otherwise, the tax calculation will not function.
2) Depress [AT/TL] to end the cyclic break entries as well as the entire tax program.

2. COMBINATION OF NON-CYCLIC BREAKS AND % RATE

Non-cyclic Breaks

1) Do the same operation stated above in 1 from Steps 1) through 4) of Non-cyclic Breaks.

% Rate

1) Enter the tax percentage rate above the non-cyclic breaks. (The rate may be entered in maximum 5 digits; 2 digits above the decimal and 3 digits below the decimal point. For example, to set 4%, enter "4000".)

2) Depress [AT/TL] to end the percentage rate entry as well as the entire tax table program.

3. % RATE ONLY

1) Enter "0", depress [TX/M], and depress [ST].
2) Enter the percentage rate in the same manner as in 2 Step 1) above. Then depress [AT/TL] to end the entire tax table program.

NOTES: (1) A maximum of 3-digit value is entered for each break. It will result in an error with a 4-digit value or more.
(2) If any incorrect value is found to have been set during programming, first complete the entire tax table program (up to the [AT/TL] key operation), and do the correct tax table program operation over again from the first.
(3) The tax table is reset with the rate 0% and no breaks when a RAM clear has been operated.

SAMPLE OPERATION: To program the following tax tables.

1. FULL-BREAK METHOD

Tax Table			Key Operation	
			Mode Lock: SET	
Non-cyclic Breaks				
(from)	(to)	(tax)	(Enter)	(Depress)
0¢	12¢	0¢	12	[TX/M]
13	34	1	34	[TX/M]
35	59	2	59	[TX/M]
60	87	3	87	[TX/M]
				[ST]
Cyclic Breaks				
88	112	4	112	[TX/M]
113	137	5	137	[TX/M]
138	162	6	162	[TX/M]
163	187	7	187	[TX/M]
188	212	8		[AT/TL]

2. COMBINATION OF NON-CYCLIC BREAKS AND % RATE

Non-cyclic Breaks			Mode Lock: SET	
0¢	12¢	0¢	12	[TX/M]
13	34	1	34	[TX/M]
35	59	2	59	[TX/M]
60	87	3	87	[TX/M]
				[ST]
5% above Non-cyclic Breaks			5000	[AT/TL]

Thank you
Call again

12-20-86

0.12   TM
0.34   TM
0.59   TM
0.87   TM
0.87   ST
1.12   TM
1.37   TM
1.62   TM
1.87   TM
1.87   TL
0 0 0 4 °
10-01

0.12   TM
0.34   TM
0.59   TM
0.87   TM
0.87   ST
5.0 0 0.   %
0 0 4 7 °
11-25

-26-

3. % RATE ONLY

10% to any amount   Mode Lock: SET

                                     0   [TX/M]
                                        [ST]
                                 10000 [AT/TL]

```
                    0.00  ℡
                    0.00  ₅
           1 0. 0 0 0.     %
           0 0 4 8 ⁰⁰ₒ
           1 1 - 2 6
```

SETTING THE DATE

A standard calendar (up to the year of 2099) and TIME-OF-DAY (TOD) clock circuit is installed in MA-205 model. Therefore, once the date and the time is set, seldom is adjustment necessary. Neither is a leap year adjustment necessary up to the year of 2099.

CONDITION: Any time outside a sale

OPERATION: Mode Lock: SET

6 [X] ⟶ |MONTH|DAY|YEAR| ⟶ [AT/TL]

        1 to 12
           01 to 31
              86, 87, etc.

The entry order may be DAY-MONTH-YEAR or YEAR-MONTH-DAY instead of MONTH-DAY-YEAR if so detemined in the operation "SETTING BASIC REGISTER REQUIREMENTS BY 6-DIGIT CODE ENTRY" on page 22.

|DAY|MONTH|YEAR|

    1 to 31
       01 to 12
          86, 87, etc.

|YEAR|MONTH|DAY|

86,87,etc.
       01 to 12
         01 to 31

SAMPLE OPERATION:

To set the date "December 20, 1986":

Mode Lock to SET.
Enter   1 2 2 0 8 6, depress [AT/TL].

```
  Thank you
   Call again


  0 0. - 0 0. - 0 0


# - 0. 6
  1 2. - 2 0. - 8 6
0 0 0. 3 ⁰⁰ₒ
1 0 - 0 0
```

SETTING THE TIME

CONDITION: Any time outside a sale

OPERATION: Mode Lock: SET

5 [X] ⟶ |HOUR|MINUTE| ⟶ [AT/TL]

    0 to 24
         00 to 59

SAMPLE OPERATION:

To set the time "10:00 a.m.":
    Mode Lock to SET.
    Enter 1000, depress [AT/TL].

```
  Thank you
  Call again


  0 0.- 0 0.- 0 0



  # - 0. 5
  1 0 - 0 0
  0 0 0. 5 ͖
  1 0 - 0 0
```
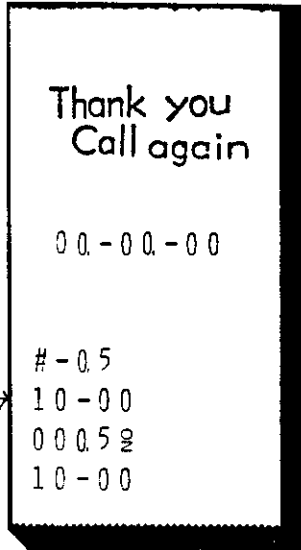
SETTING THE DEPARTMENT KEYS TO TAXABLE OR NON-TAXABLE STATUS

This sets each department key to taxable or non-taxable status.

CONDITION: After a reset

OPERATION: Mode Lock: SET

Depress [TX/M] followed by the Department Key whose taxable/non-taxable status is to be reversed.

NOTES: 1. The [TX/M] key functions as status-reverse key in the SET mode. Therefore, if it is depressed before a non-taxable department key, the department is now set as a taxable department. If it is depressed before a taxable department, the department is now set as a non-taxable department. If the AMOUNT DISPLAY shows 0.01, the department is now set as taxable. If it shows 0.00, the department is now set as non-taxable.
2. The [%-] key cannot be set to taxable status. It is always a non-taxable key. However, the taxable status of the [%-] key can also be reversed by using the [TX/M] key in the REG mode, just as the taxable/non-taxable status of any department can be reversed in the REG mode by using the [TX/M] key.

SAMPLE OPERATION:

To set Department 1 to be a taxable department (presumed that Dept.1 has been a non-taxable department):

KEY OPERATION   AMOUNT DISPLAY

Mode Lock to "SET"

    [TX/M]   0.00
    [DEPT 1]   0.01 ... indicates "taxable"

Then, to reset Department 1 to a non-taxable dept.:

Mode Lock to "SET"

    [TX/M]   0.00
    [DEPT 1]   0.00 ... indicates
                                                "non-taxable"
(No prining will take place in this programming operation.)

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SETTING THE %- PRESET RATE

A preset rate from 0% to 99% may be set on the [%-] key. Once a rate is set, a simple depression of the [%-] key will function with the preset rate in the REG mode. If a manual rate is entered before [%-], it will function with the manual rate instead. If 0% is preset, the [%-] key will always require a manual rate entry in REG mode operations.

CONDITION: Anytime outside a sale

OPERATION: Mode Lock: SET

   Enter the preset rate in max.
2 digits (0 ~ 99%), and
depress [%-].

SAMPLE OPERATION:

   To set "10%" as the preset
rate on the [%-] key:

      Mode Lock to SET.
Enter 10, depress [%-].

```
 Thank you
  Call again


  12-20-86


# 10    %-
0049 2
11-30
```
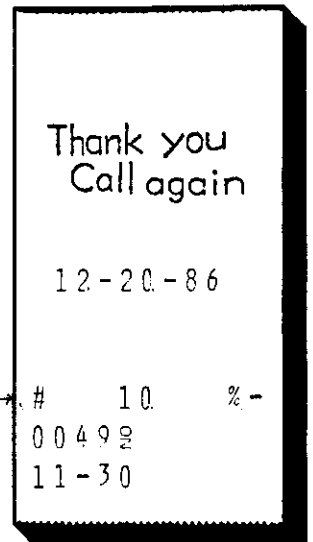
SETTING AND RESETTING DRAWER-CLOSE COMPULSION

If the DRAWER CLOSE COMPULSION is set, all the key operations except [RF], [JF], and [C] with the drawer kept open will result in errors.

CONDITION: After a reset

OPERATION: Mode Lock: SET

   To set DRAWER-CLOSE COMPULSION:

      Enter 1, depress [AT/TL].

   To reset DRAWER-CLOSE COMPULSION:

      Enter 0, depress [AT/TL].

   NOTE: If any number other than
0 and 1 is entered in the
above operation, it will
be regarded the same as 1
(for set) is entered.

```
 Thank you
  Call again


  12-20-86


#     0.01    AT
0051 2
11-31
```

```
#     0.00    AT
0052 2
11-32
```
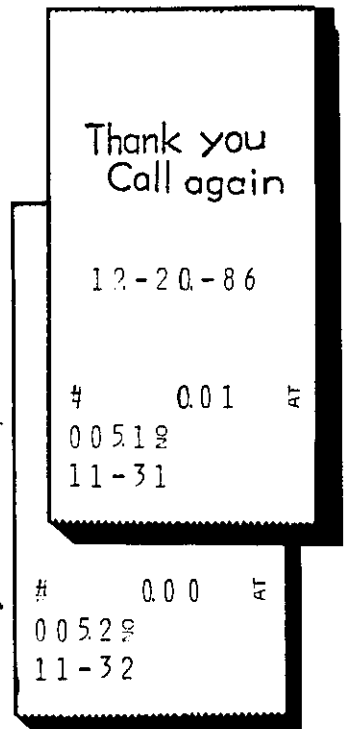
SETTING HOURLY RANGE TABLE

This sets the hourly ranges for the report purpose. A maximum of 16 hourly ranges may be set and the time division entry value must be 2-digit (i.e. unit of one hour). When hourly ranges are set here, the sales data registered in the REG mode will be processed into each hourly range memory and the houry range sales data will be printed in the Read and Reset reports, along with Department and Financial data.

CONDITION: After a reset

OPERATION: Mode Lock: SET

```
7 [X] ──→ |Ending time of each hourly range|   [#]   ──→ [AT/TL]
              Enter 0 to 23 (max. 2 digits)
              to indicate the hour value
              (no minute value may be entered.)

              Repeat until all the required hourly
              ranges are set. A maximum of 16 hourly
              ranges may be set.
```
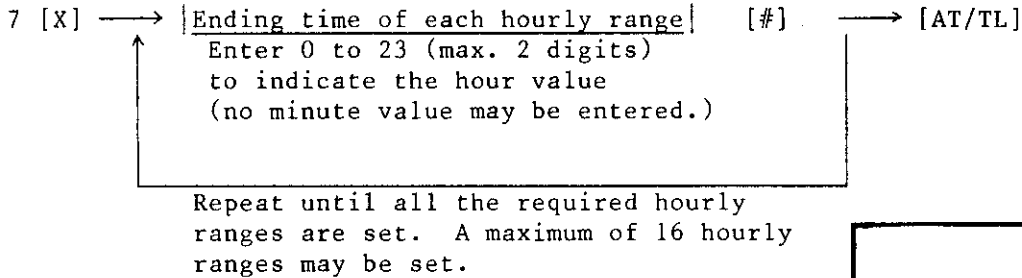
SAMPLE OPERATION:

To set the following hourly range table of
5 hourly ranges:

from	to	Mode Lock to SET. Enter 7, depress [X].
22:00 (previous day)	10:00	Enter 10, depress [#] .
10:00	12:00	Enter 12, depress [#] .
12:00	15:00	Enter 15, depress [#] .
15:00	22:00	Enter 22, depress [#] .
		Depress [AT/TL] to end.

```
Thank you
Call again

12-20-86


#-0.7
10-00
12-00
15-00
22-00
000.5≗
11-35
```
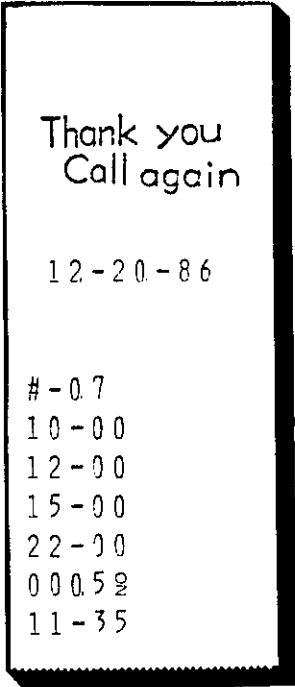
NOTES: 1. In setting the hourly ranges, enter from the early ending time to later ones correctly in order.
2. Do not set an hourly range across 24:00. If ever set, the sales data in that hourly range will not be processed. The hourly range from the last time division (ending time) to the first time division will automatically be set as the first hourly range, as can be seen in the SAMPLE OPERATION.
3. In need of resetting the hourly range table once set, operate as follows:
   Mode Lock to SET, 7 [X] 0 [#] [AT/TL]
4. In need of changing the hourly range table once set, partially or entirely, do the entire hourly range table setting operation again.

-30-

PROGRAM VERIFICATION

VERIFYING THE PROGRAMMED DATA

The programmed data may
be read by issuing a
program verification
receipt by the following
operation:

OPERATION: Mode Lock: X

Depress [ST].
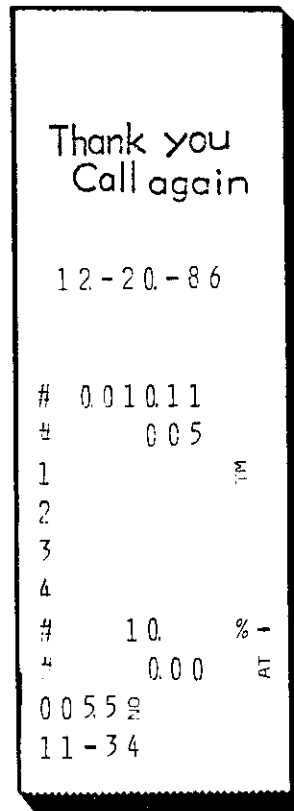
```
      Thank you
      Call again


  1 2 - 2 0 - 8 6          Date


#  0 0 1 0 1 1             6-digit Code for Basic Requirements
#       0 0 5              Listing Capacity
1                    PM    Taxable Department
2                         ]
3                          | Non-Taxble Departments
4                         ]
#     1 0.      % -        [%-] Key Preset Rate
#        0 0 0      AT     Drawer-close Non-compulsory
0 0 5 5                    Consecutive No.
1 1 - 3 4                  Current Time
```

TAX CALCULATION TEST

Calculation test may be performed to check if the programmed tax table
functions properly.

OPERATION: Mode Lock: X

Enter any amount through the numeric keys, and depress [TXBL TL]. The
tax due to the entered amount will be displayed. (No printing will take
place. The amount entered or the obtained tax amount will not affect
any sales total memories.) Repeat the amount entry and the [TXBL TL]
operation as many times as desired, alternating the amount, until the
programmed tax table is found to be set properly.

ex.)   KEY OPERATION   AMOUNT DISPLAY

    Control Lock to X.

        Enter 200   2.00 --- entered amount

        Depress [TXBL TL]   0.20 --- tax due

        Enter 1245   12.45 --- entered amount

        Depress [TXBL TL]   1.25 --- tax due

                                   (in case tax rate of 10%
                                    has been programmed)

VERIFYING THE TIME

The current time can also be read by turning the Mode Lock to the "REG"
position. Refer to "TIME DISPLAY" on page 4.

PAPER ROLL REPLACEMENT AND OTHER MAINTENANCE OPERATIONS
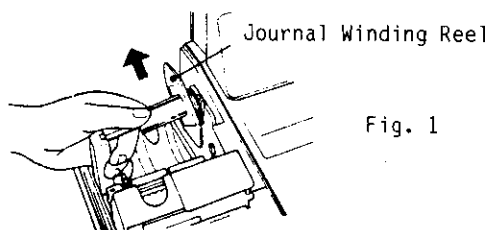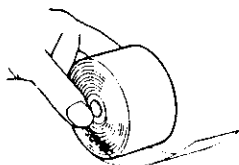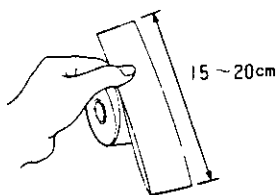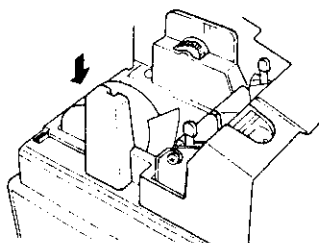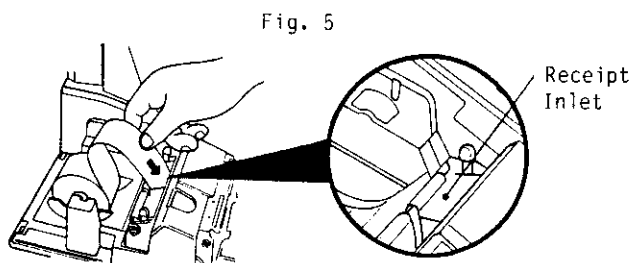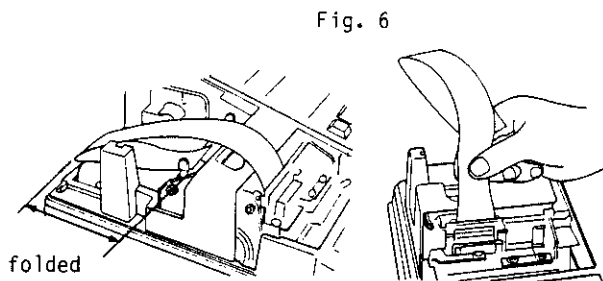
INSTALLING THE RECEIPT PAPER

Journal Winding Reel

Fig. 1

Fig. 2

15~20cm

Fig. 3

1. Turn the Mode Lock to the "REG" position.
2. Remove the Paper Cover, and remove the Journal Winding Reel. (Fig. 1)
3. Hold a new paper in the direction as shown in Fig. 2 so that the paper end will be fed from the bottom.
4. Fold the paper end firmly as shown in Fig. 3 to ease the insertion.
5. Place the paper roll in the outer-side holder of the two roll holders. (Fig. 4)
6. Insert the paper end into the Receipt Inlet, feed the paper in while pressing down the [RF] key. (Fig. 5)
7. When all the folded portion comes out, tear off the unnecessary part with the attached cutting edge. (Fig. 6)
8. Go on to INSTALLING THE JOURNAL PAPER steps if necessary, or go on to Step 9 below if not.
9. Attach the Paper Cover.
10. Depress the [NS] key to issue a receipt to check if the paper has properly been set.

Fig. 4

Fig. 5

Receipt
Inlet

Fig. 6

folded
portion

Cut the paper with tne edge.
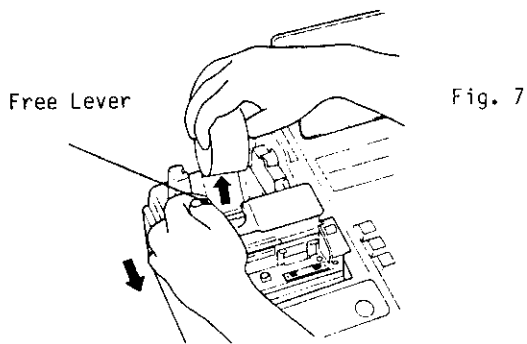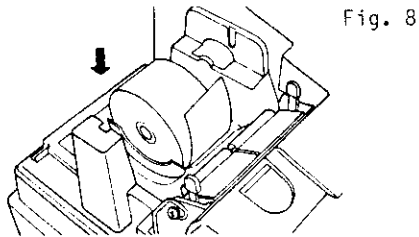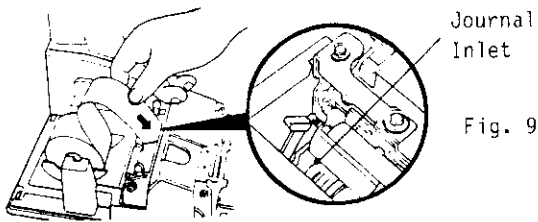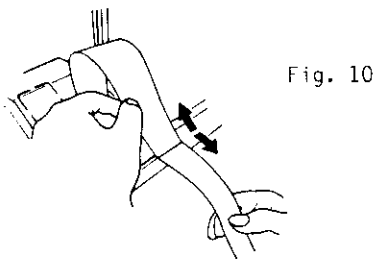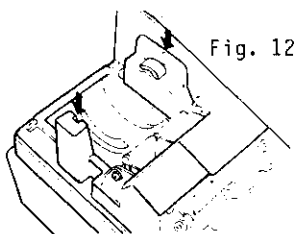
Free Lever   Fig. 7

REMOVING THE RECEIPT PAPER

1. Remove the Paper Cover.
2. Press the Free Lever down and pull
   the old paper core upward to remove
   the remaining paper end. (Fig.7)

Fig. 8

INSTALLING THE JOURNAL PAPER

1. Turn the Mode Lock to the "REG"
   position.
2. Remove the Paper Cover by pulling it
   upward, and remove the Journal
   Winding Reel. (Fig.1)
3. Follow Steps 3 and 4 of INSTALLING
   THE RECEIPT PAPER on the previous
   page.
4. Place the paper roll in the
   inner-side roll holder of the two
   holders. (Fig.8)
5. Insert the paper end into the Journal
   Inlet, feed the paper in while
   pressing down the [JF] key. (Fig.9)
6. When the paper comes out for a enough
   length, open the folded end.
   (Fig.10)
7. Wind the paper end on the Journal
   Winding Reel two or three times as
   shown in Fig.11.
8. Set the Journal Winding Reel to the
   Reel Holder. (Fig.12)
9. Attach the paper cover.

Journal
Inlet

Fig. 9

Fig. 10

REMOVING THE JOURNAL PAPER

1. Remove the Paper Cover.
2. Press the [JF] key to wind up enough
   portion of the journal paper, and
   then tear off the paper, holding the
   Journal Winding Reel.
3. The wound-up portion of the paper can
   easily be removed from the Reel by
   pulling it side way. (Fig.13)
4. If enough paper remains on the roll,
   follow Steps 6 through 9 above; if
   paper is running out, follow Steps 1
   through 9 above.

Fig. 11

Fig. 12

Fig. 13

REPLACING THE INK ROLL
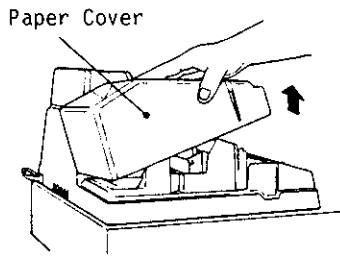
When the receipt and journal print becomes too light to read, replace the Ink Roll in the following manner.
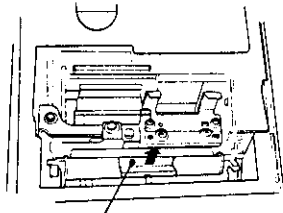
1. Turn the Mode Lock to the "OFF" position.
2. Remove the Paper Cover. (Fig.1)
3. Hold the Ink Roll Knob and pull it upward. The Ink Roll will be removed. (Fig.2)
4. Insert a new Ink Roll into the space between the Ink Roll Holder and the Frame. (Fig.3)
5. When replacement is completed, attach the Paper Cover (Fig.4) and turn the Mode Lock to the "REG" position.

* The Ink Roll is a comsumable product and a genuine part supplied by TEC. Ask your TEC representative for an additional order. (Fig.5)
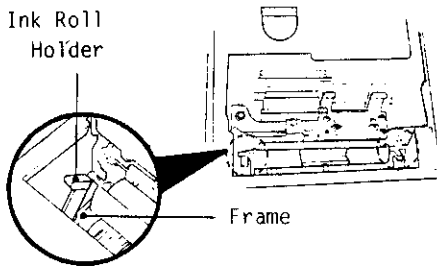
REPLENISHING INK TO THE STORE MESSAGE STAMP

When the store message is printed too lightly, replenish ink in the following manner.
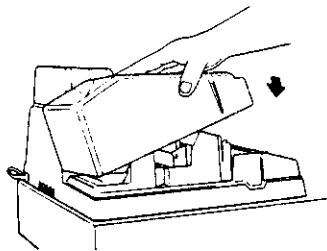
1. Turn the Mode Lock to the "OFF" position.
2. Open the Paper Cover. (Fig. 1)
3. Hold the both sides of the stamp unit with your fingers and remove it by pulling it upward. (Fig.6)
4. Apply ink to the replenishment pad at the back of the stamp unit. The amount of refilling should be adjusted according to the density of the printed message. (The supplied ink bottle contains 5cc of ink.) (Fig.7)
5. When replenishing of ink is completed, attach the Paper Cover (Fig.4) and turn the Mode Lock to the "REG" position.
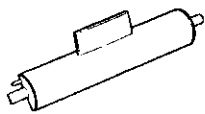
Paper Cover — Fig. 1

Fig. 2

Ink Roll Knob

Ink Roll Holder — Fig. 3

Frame

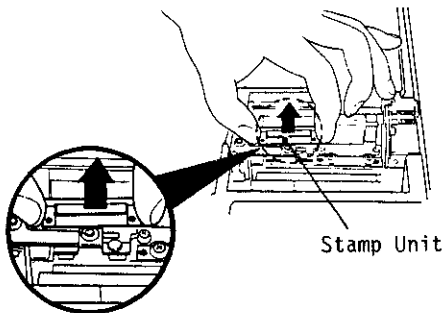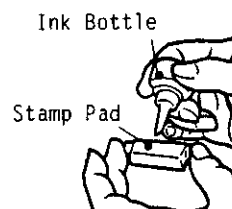Fig. 4

Fig. 5

Ink Roll

Fig. 6

Stamp Unit

Fig. 7

Ink Bottle

Stamp Pad

MANUAL DRAWER RELEASING

The drawer opens automatically when a registration is performed. In the event of a power failure or other troubles, the drawer can be opened manually in the following manner.
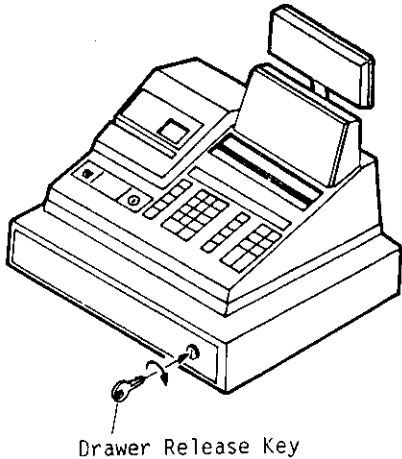
1. Insert the Drawer Release Key into the Drawer Release Lock and turn the key clockwise. The drawer will now open. (Fig.1)
2. The Drawer Release Key can be taken out by returning it to the original position.
3. When the drawer is closed, it is automatically locked and will not open without the Drawer Release Key or normal registering operation.
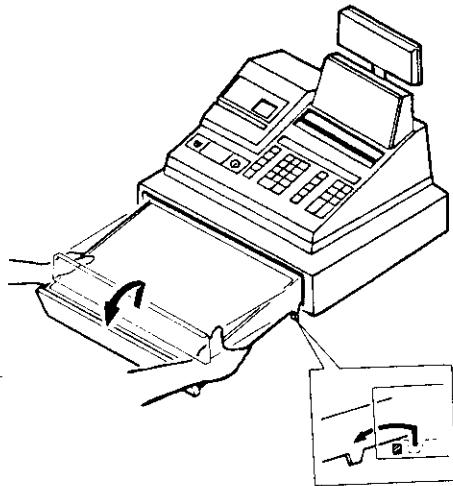
REMOVING THE DRAWER

1. Pull the drawer out, and when it stops by the stopper, lift the drawer up and pull it again (Fig.2). When it stops again by the roller fixed in the drawer case, lift it and pull it again (Fig.3).
2. When returning to drawer, follow the reverse procedure to removing.

CDC (Cash Drawer Cover) LOCK

Locking (Fig.4)

1. Push the Cash Drawer Cover to the drawer-end.
2. Press the cover lightly, insert the key into the key-hole on the cover, and turn it to lock.

Opening

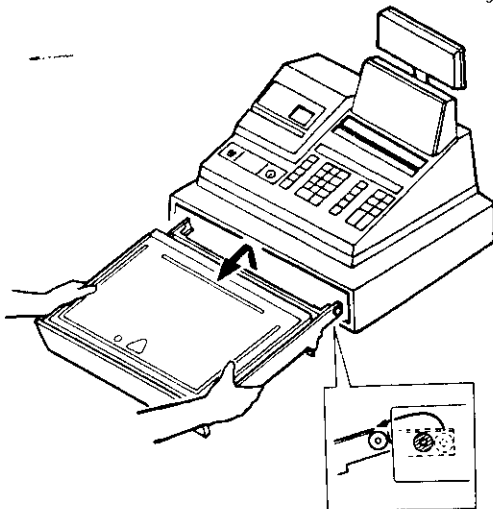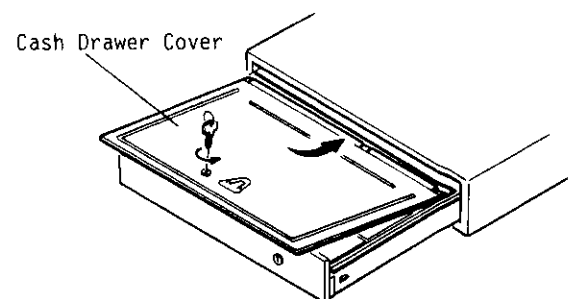Release the lock by the key, and lift the front end of the cover.

Drawer Release Key

Fig. 1

Fig. 2

Fig. 3

Cash Drawer Cover

Fig. 4

SPECIFICATIONS

SIZE .... 400mm(width) x 460mm(depth) x 381mm(height)

WEIGHT 14.5kg

POWER REQUIRED .... AC 100V, 110V, 117V, 220V, 240V;   50/60Hz
                              (depending on the destination)

POWER CONSUMED .... 4.8W when non-operating
                             19W when operating

SIZE OF RECEIPT AND JOURNAL TAPE
              .... 38mm(width) x 70mm(diameter)

AMBIENT TEMPERATURE .... 0°C to 40°C, 15% to 90% Relative Humidity

Memo